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09/381,334	11/18/1999	KARI VIRTANEN	060258-0264014	3837
909 7590 02/02/2010 PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 MCLEAN, VA 22102				
EXAMINER				
IQBAL, KHAWAR				
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2617				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

09/381,334

## Applicant(s)

VIRTANEN, KARI

## Examiner

KHAWAR IQBAL

## Art Unit

2617

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-9,11,13 and 15-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-9,11,13 and 15-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-9, 11, 13, 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amin et al (20020058506) in view of Forslow (20030039237).

Regarding claims 1 and 18 Amin teaches a method of registering a multimode mobile station in a telecommunications system, wherein the telecommunications system comprises a home location register for maintaining mobile subscriber data and supports a first network and a second network different type, the method comprising:

In the home location register (HLR 66, fig. 1), maintaining the mobile subscriber (roaming mobile station 30, fig. 1) data (para. # 0011, fig. 2), and receiving, from another network element, a message for requesting the mobile subscriber data, the mobile subscriber data comprising address information for accessing the mobile subscriber via the first and the second network different type [roaming network 104 and home network 120 are different type] ( para. # 0024);

the home location register (HLR 66, fig. 1) maintaining a subscriber-specific access parameter (MIN and ESN, fig. 2, 4) which indicates, independently of the address information (Roaming restriction {rrm list time specification} subscribed features, roaming characteristic, fig. 2, 4), whether the mobile subscriber has access

rights to the first network (home network 120, fig. 1) and/or the second network (roaming network 104, fig. 1) (the service request includes identification information, including an electronic serial number, associated with the end user device, and information indicative of the roaming area from which the request was initiated. A profile associated with the end user device is retrieved based on part of the identification information. The request is denied to the device when it is received within a roaming restriction time window identified in the profile for the roaming area. Preferably, the end user device has a mobile identification number, para. # 0025-0028);

in response to said message for requesting the mobile subscriber data, the home location register (HLR 66, fig. 1) sends the mobile subscriber data and also said subscriber-specific access parameter (para. # 0025-0028);

wherein the network element that requested the mobile subscriber data is operable to use said subscriber-specific access parameter for restricting the location updating of the mobile station only to the first network or to the second network different type (para. # 0025-0028, fig. 2 and 4). Amin et al does not specifically state wherein the first network and second network are provided by a common operator.

In an analogous art, Forslow I teaches wherein the first network (35, fig. 2) and second network (51, fig. 2) are provided by a common operator and the first network (35, fig. 2) and second network (51, fig. 2) are of different type (para. # 0030, 0050, 0053-0054, 0075, 0099). Forslow also teaches that the PDP subscription record includes subscribed quality of service profiles/parameters and list of services which a mobile subscriber is authorized to use along with a current subscriber location number

corresponding to the address of the VLR currently serving the mobile subscriber subscribed-to external networks, a mobile subscriber MS ID such as International Mobile Subscriber Identity IMSI. etc. When a mobile station attaches to a general packet radio service GPRS network the mobile station's subscription record is retrieved from a home location register HLR 42. As a result of PDP context activation, a network layer bearer is established between the mobile station and the gateway GPRS support node GGSN 54, para. # 0011, 0030-0032 and 0050). Forslow states that the PDP subscription record includes subscribed quality of service profiles/parameters and list of services which a mobile subscriber is authorized to use along with a current subscriber location number corresponding to the address of the VLR currently serving the mobile subscriber subscribed-to external networks, a mobile subscriber MS ID such as International Mobile Subscriber Identity IMSI. etc. When a mobile station attaches to a general packet radio service GPRS network the mobile station's subscription record is retrieved from a home location register HLR 42. As a result of PDP context activation, a network layer bearer is established between the mobile station and the gateway GPRS support node GGSN 54. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Amin by specifically adding features in order to enhance wherein the first network and second network are provided by a common operator to increasing the efficiency of the communication system for registry procedure and provides quality of service based, radio Internet access in order to support multiple application services including voice, data,

and multimedia, where some of the applications may have several application flows operating simultaneously as taught by Forslow.

Regarding claims 2, 19 Amin teaches a method of registering a multimode mobile station in a telecommunications system, wherein the telecommunications system comprises a home location register for maintaining mobile subscriber data and supports a first network and a second network, mobile subscriber data comprising address information for accessing the mobile subscriber via the first and the second network, and a subscriber-specific access parameter indicating, whether the mobile subscriber has access rights to the first network and/or the second network of the different type, the method comprising:

sending from another network element to the home location register a message for requesting the mobile subscriber data, the mobile subscriber data comprising said subscriber-specific access parameter indicating, independently of the address information, whether the mobile subscriber is entitled to use the first network, the second network or both networks of the different type (para. # 0024-0028);

the network element that requested the mobile subscriber data using said subscriber-specific access parameter which indicates, independently of the address information to restrict the access of the mobile subscriber only to the first and/or the second network of the different type (para. # 0024-0028 see above). Amin et al does not specifically state wherein the first network and second network are provided by a common operator.

In an analogous art, Forslow I teaches wherein the first network (35, fig. 2) and second network (51, fig. 2) are provided by a common operator and the first network (35, fig. 2) and second network (51, fig. 2) are of different type (para. # 0030, 0050, 0053-0054, 0075, 0099). Forslow also teaches that the PDP subscription record includes subscribed quality of service profiles/parameters and list of services which a mobile subscriber is authorized to use along with a current subscriber location number corresponding to the address of the VLR currently serving the mobile subscriber subscribed-to external networks, a mobile subscriber MS ID such as International Mobile Subscriber Identity IMSI. etc. When a mobile station attaches to a general packet radio service GPRS network the mobile station's subscription record is retrieved from a home location register HLR 42. As a result of PDP context activation, a network layer bearer is established between the mobile station and the gateway GPRS support node GGSN 54, para. # 0011, 0030-0032 and 0050). Forslow states that the PDP subscription record includes subscribed quality of service profiles/parameters and list of services which a mobile subscriber is authorized to use along with a current subscriber location number corresponding to the address of the VLR currently serving the mobile subscriber subscribed-to external networks, a mobile subscriber MS ID such as International Mobile Subscriber Identity IMSI. etc. When a mobile station attaches to a general packet radio service GPRS network the mobile station's subscription record is retrieved from a home location register HLR 42. As a result of PDP context activation, a network layer bearer is established between the mobile station and the gateway GPRS support node GGSN 54. Therefore, it would have been obvious to one of ordinary skill

in the art at the time the invention was made to modify the device of Amin by specifically adding features in order to enhance wherein the first network and second network are provided by a common operator to increasing the efficiency of the communication system for registry procedure and provides quality of service based, radio Internet access in order to support multiple application services including voice, data, and multimedia, where some of the applications may have several application flows operating simultaneously as taught by Forslow.

Regarding claims 8, 20 Amin teaches a home location register configured to operate in a telecommunications system that supports multimode mobile stations and which comprises a first network and a second network of a different type, the home location register comprising:

- a computer readable storage medium configured to store: a processor; and
- a memory operatively connected to the processor and configured to store mobile subscriber data for registering a mobile station, the mobile subscriber data comprising address information for accessing the mobile subscriber station via the first and the second network (para. # 0024-0028, fig. 1 and 4); and

- a subscriber-specific access parameter which indicates, independently of the address information, whether a mobile subscriber to whom the mobile station has been registered has access rights to the first network and/or the second network of the different type (para. # 0024-0028, fig. 1 and 4);

- wherein the processor is configured to receive, from another network element, a location update message for the mobile station and to send the mobile subscriber data



and said subscriber- specific access parameter as a response to said location update message (para. # 0024-0028, fig. 1, 2 and 4). Amin et al does not specifically state wherein the first network and second network are provided by a common operator.

In an analogous art, Forslow I teaches wherein the first network (35, fig. 2) and second network (51, fig. 2) are provided by a common operator and the first network (35, fig. 2) and second network (51, fig. 2) are of different type (para. # 0030, 0050, 0053-0054, 0075, 0099). Forslow also teaches that the PDP subscription record includes subscribed quality of service profiles/parameters and list of services which a mobile subscriber is authorized to use along with a current subscriber location number corresponding to the address of the VLR currently serving the mobile subscriber subscribed-to external networks, a mobile subscriber MS ID such as International Mobile Subscriber Identity IMSI. etc. When a mobile station attaches to a general packet radio service GPRS network the mobile station s subscription record is retrieved from a home location register HLR 42. As a result of PDP context activation, a network layer bearer is established between the mobile station and the gateway GPRS support node GGSN 54, para. # 0011, 0030-0032 and 0050). Forslow states that the PDP subscription record includes subscribed quality of service profiles/parameters and list of services which a mobile subscriber is authorized to use along with a current subscriber location number corresponding to the address of the VLR currently serving the mobile subscriber subscribed-to external networks, a mobile subscriber MS ID such as International Mobile Subscriber Identity IMSI. etc. When a mobile station attaches to a general packet radio service GPRS network the mobile station s subscription record is

retrieved from a home location register HLR 42. As a result of PDP context activation, a network layer bearer is established between the mobile station and the gateway GPRS support node GGSN 54. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Amin by specifically adding features in order to enhance wherein the first network and second network are provided by a common operator to increasing the efficiency of the communication system for registry procedure and provides quality of service based, radio Internet access in order to support multiple application services including voice, data, and multimedia, where some of the applications may have several application flows operating simultaneously as taught by Forslow.

Regarding claim 15 Amin teaches a network element for a telecommunications system, which telecommunications system comprises a home location register for maintaining mobile subscriber data for registering a multimode mobile station in the telecommunications system which supports a first network, a second network, and multimode mobile stations, the mobile subscriber data comprising address information for accessing the mobile subscriber via the first and the second network and a subscriber-specific access parameter indicating, whether the mobile subscriber has access right to the first network and/or the second network:

sends, to the home location register a message for location updating of the mobile station (para. # 0024-0028 see claim 1);

use said subscriber-specific access parameter to restrict the access of the mobile subscriber station only to the first and/or the second network (para. # 0024-0028 see claim 1);

receive the mobile subscriber data and said subscriber-specific access parameter as a response to said message (para. # 0024-0028 see claim 1);

wherein the first network and second network are provided by a common operator, and the first network and the second network are of different type (para. # 0024-0028 see claim 1).

Amin et al does not specifically state wherein the first network and second network are provided by a common operator.

In an analogous art, Forslow I teaches wherein the first network (35, fig. 2) and second network (51, fig. 2) are provided by a common operator and the first network (35, fig. 2) and second network (51, fig. 2) are of different type (para. # 0030, 0050, 0053-0054, 0075, 0099). Forslow also teaches that the PDP subscription record includes subscribed quality of service profiles/parameters and list of services which a mobile subscriber is authorized to use along with a current subscriber location number corresponding to the address of the VLR currently serving the mobile subscriber subscribed-to external networks, a mobile subscriber MS ID such as International Mobile Subscriber Identity IMSI. etc. When a mobile station attaches to a general packet radio service GPRS network the mobile station's subscription record is retrieved from a home location register HLR 42. As a result of PDP context activation, a network layer bearer is established between the mobile station and the gateway GPRS support

node GGSN 54, para. # 0011, 0030-0032 and 0050). Forslow states that the PDP subscription record includes subscribed quality of service profiles/parameters and list of services which a mobile subscriber is authorized to use along with a current subscriber location number corresponding to the address of the VLR currently serving the mobile subscriber subscribed-to external networks, a mobile subscriber MS ID such as International Mobile Subscriber Identity IMSI. etc. When a mobile station attaches to a general packet radio service GPRS network the mobile station's subscription record is retrieved from a home location register HLR 42. As a result of PDP context activation, a network layer bearer is established between the mobile station and the gateway GPRS support node GGSN 54. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Amin by specifically adding features in order to enhance wherein the first network and second network are provided by a common operator to increasing the efficiency of the communication system for registry procedure and provides quality of service based, radio Internet access in order to support multiple application services including voice, data, and multimedia, where some of the applications may have several application flows operating simultaneously as taught by Forslow.

Regarding claim 3 Amin teaches the mobile subscriber's access can be restricted only to one network even though a short message service had been defined for the mobile subscriber (para. # 0024-0028 see claim 1 above).

Regarding claim 6 Amin teaches wherein the telecommunications system comprises a visitor location register; and when the mobile station is in the area of the visitor

location register and receives a call or a short message and the visitor location register does not have data of the mobile subscriber, said subscriber-specific access parameter is used for restricting paging of the mobile station only to a network which the mobile subscriber has access rights to (para. # 0024-0028, see claim 1 Forslow above).

Regarding claims 7, 11, 13, 17, 21 Forslow teach first network is a circuit-switch and second is packet-switched (para. # 0009, fig. 2, see claim 1 above).

Regarding claims 9, 16 Amin teaches wherein the data structure is located in a home location register of the telecommunications system (para. # 0024-0028 see claim 1).

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-3, 6-9, 11, 13, 15-21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAWAR IQBAL whose telephone number is (571)272-7909. The examiner can normally be reached on 9 am to 6.30 pm Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GEORGE ENG can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/  
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